

June 21 Meeting Program

General Meeting

June 21, 2013 7:30pm

**Heather Farms Park
301 North San Carlos Drive
Walnut Creek**

License Testing at 6:00pm

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This month's general meeting will be held at the club Field Day site at in Heather Farms Park, 301 North San Carlos Drive, Walnut Creek. License testing will start at 6 PM and the General Meeting portion will start at 7:30 PM . We will go from station to station and talk with each band captain about their antenna system and station setup, and how they plan to operate on Field Day.

*73, Jim Siemons, AF6PU
President*

AMATEUR RADIO SUPPORT NEEDED FOR THESE UPCOMING PUBLIC SERVICE EVENTS

4th of July Parade

July 4 - Downtown Pleasant Hill

Radio Coordinator: Pete Harris, KE6ZIW

Pete Harris, KE6ZIW

Public Services Coordinator

Pharris125@comcast.net

925-228-4503



Affiliated Club

Mount Diablo Amateur Radio Club W6CX
P.O. Box 23222 Pleasant Hill, CA 94523
(925) 288-1730

The Carrier is a monthly publication of the Mount Diablo Amateur Radio Club (MDARC). It is the policy of the editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio and of interest to MDARC members, and provided space is available.

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Field Day Chairs - Lauren Styles, WA6CIE and

Elizabeth Styles, KG6HLV

Communications Trailer - Brent Morgan, AF6HQ

Refreshments: Elizabeth Styles KG6HLV

Holiday Dinner: Misa Siemons KJ6BUE

Annual Picnic - Lauren Styles, WA6CIE

The Carrier Newsletter

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ALL MEMBERS ARE INVITED TO JOIN THE CLUB YAHOO GROUP. DOWNLOAD FILES, INCLUDING *THE CARRIER* IN FULL COLOR AS WELL AS SHARE INFORMATION WITH THE MEMBERSHIP AT:



PRESIDENT'S QTC

The spring activities have really been moving along nicely in the world of amateur radio. MDARC members have been involved with and organized the communications for many public service events over the last several months. It is great to hear our W6CX repeaters being used the wide variety of activities that take place every spring, and continue throughout the summer.

We received word that the California Historical Radio Society's (CHRS) plan to purchase the building that they are in, has fallen through. This is really devastating for that organization and for those that love all things RF! They have become a repository of the history of radio in the greater area. They will still try to see if they can do anything interesting or renegotiate, but are otherwise looking for another suitable space to move all their historic equipment, the Bay Area Radio Hall of Fame, an amazing library, workshop, meeting area, and amateur radio station. MDARC had pledged \$1,000 towards the purchase of the building. CHRS did not call our pledge, because a deal was never completed.

Coming up is Field Day. We are planning a wonderful Field Day this year at Heather Farm Park in Walnut Creek. Friday night we are holding our monthly General Meeting in the park. Starting at 6:00 PM, we are offering ham license testing, and the General Meeting portion will start at 7:30. We will go from station to station and talk with each band captain about their antenna system(s) and station setup, and how they plan to operate on Field Day. Come on out on Friday, and certainly, the entire weekend! If you have not been on HF or not in a while, this will be a great opportunity to have some fun!

Our July meeting will be a presentation by the Maritime Radio Historical Society (MRHS), followed by a tour on Saturday at their location in Point Reyes. It will be an awesome time!

If you would like to get involved more in MDARC, please consider coming to our monthly Board Meetings on the first Monday of each month at Black Bear Diner in Walnut Creek at 7:00. Also, consider getting involved in PACIFICON, with our monthly meetings on the second Monday of each month at the Concord Salvation Army at 7:00 pm.

See you all down the logbook.

Hope to see (or hear) you all soon. Until next month...

*73, Jim Siemons, AF6PU, President
Chair, PACIFICON*



W6CX FIELD DAY 2013

Location: Heather Farms Park in the large parking lot near the community center, 301 North San Carlos Drive, Walnut Creek (turn off Ygnacio Valley Road between the Shell station and the baseball field) on Friday June 21, 2013 through Sunday June 23, 2013.

At the Field Day Site:

Setup starts at 12 Noon on Friday

License Testing at 6PM on Friday

Club General Meeting 7:30 PM Friday: Program will be on how to participate either at the Field Day site or from your home/mobile. Meet the Band Captains and learn how to operate in a portable field environment.

FD starts 11 AM Saturday and ends 11 AM Sunday

Cleanup and vacate site by 2 PM Sunday

Chairman: Lauren Styles WA6CIE

80 & 40 Meter Band Captain: Steve Wagner KA6SFT

20 & 10 Meter Band Captain: Ben Heathorn KI6WBH

15 Meter Band Captain: Jim Siemons AF6PU

6 Meters (and above) Captain: Mitchell Boyce W8DOD

FD contest is not run on the 60, 30, 17, or 12 meter bands.

Field Day (FD) is a fun weekend where everyone at our site has an opportunity to operate on HF, you will learn how to listen, make contacts, log and begin to see how propagation works. New Hams and Oldtimer alike can always find somewhere participate. This year the sunspot cycle is near its peak and some of the bands may be open all night. There will be around 2,000 FD sites around the USA and Canada to try contacting and we will try to work as many as possible on as many bands as possible.

Our biggest need is PEOPLE!

People to help set up / take down

People to operate around the clock from Saturday to Sunday

People to be runners for supplies

And most of all we need as many club members as possible to work us on HF and VHF/UHF

If you are coming to the FD site you will need to bring sunscreen, water, hat, and your own food / cooking equipment. If staying overnight you will need your sleeping quarters, sleeping bag, etc. We are providing portable bathrooms and hand wash station.

If you cannot make it to the site or are coming and do not plan to operate a station at the site please make contacts with us. A station will be on 147.06+ most of the time with information on frequencies on HF/VHF/UHF to contact us (*repeater contacts do not count*).

If operating from home and you live in Contra Costa County call on one of the frequencies and wait for our acknowledgment. Your exchanges will be 1 D ("One Delta") East Bay (if operating from home using commercial power) or 1 C ("One Charlie") East Bay (if operating mobile). We will answer you with our exchange. You can contact us on the bands your license allows on both phone and cw/digital.

We really want to see and hear you this weekend.

More detailed information on ARRL Field Day is at <http://www.arrl.org/field-day>.

RF ID -- What's it look like?

I got recently got interested in a Municipal Railway card I used in San Francisco. I think it's pretty much like a transit *Clipper* Card. So I took the Muni card apart. It is an RF ID device.



The reader device sends a radio signal to it. It picks it up with a loop antenna and turns the signal into a voltage. That voltage energizes the on-board silicon chip of transistors. They send their digital signal back out through the loop. The reader picks it up and analyses it for "go" or "no go," or how much "go." The chip depletes its available "go" information with use. In general the device can be "recharged" with more "go" usually by money into a charging device. The Muni Card works at about 27 MHz. Chips for pets and people are much smaller and work at correspondingly higher frequencies, such as 900 MHz. Some credit cards use more complex chips and keep track of a bank or credit balance on the card.

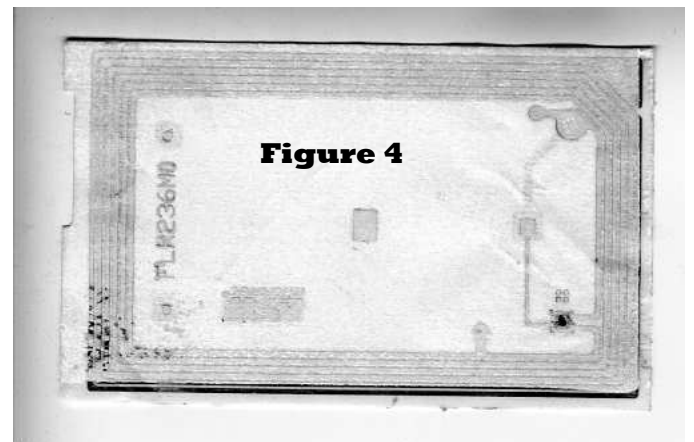
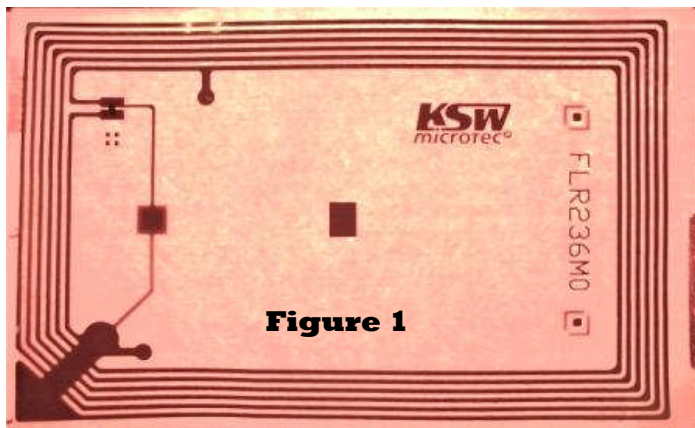
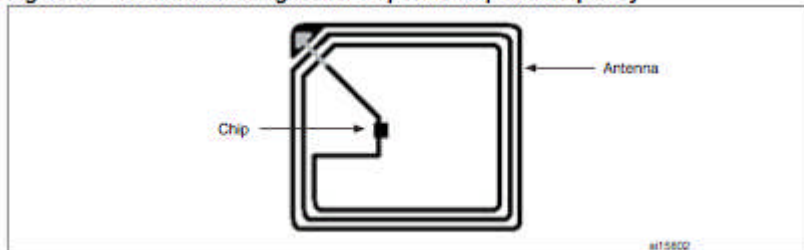


Figure 1 is an enhanced graphic of the card's physical circuit. **Figure 4** is a scan of the physical card with most of the cardboard removed. **Figure 2** is an idealized diagram of the loop and chip configuration. **Figure 3** is the electrical circuit.

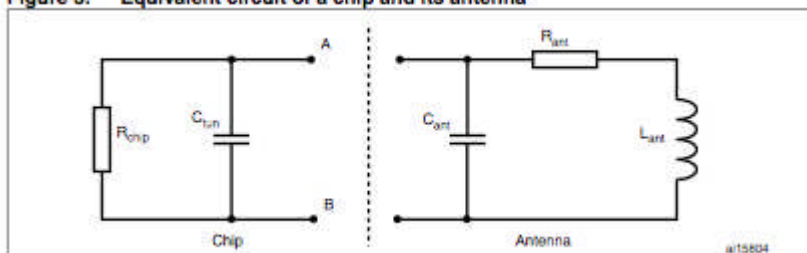
Figure 2. An antenna designed for a specific chip and frequency



The key is in the information in the chip. All the rest is just getting it in and out.

73, Bart Lee,
K6VK

Figure 3. Equivalent circuit of a chip and its antenna



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- 100W HF/6M Transceiver, gen cov. receiver • Dual DSP 32 bit • Three roofing filters- 3, 6, 15kHz • 5.8 in WQVGA TFT display • Hi-res real time spectrum scope

**IC-V8000** 2M Mobile Transceiver

- 75 watts • Dynamic Memory Scan (DMS) mode • Free software download • GPS A mode for easy D-PRS operation • One touch reply button (DV mode)
- Weather alert • Weather channel scan • 200 alphanumeric memories

Analog + Digital
Dual Bander
D-STAR

ID-880H

- D-STAR DV mode operation • DR (D-STAR repeater) mode • Free software download • GPS A mode for easy D-PRS operation • One touch reply button (DV mode)
- Wideband receiver

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FT-60R 2M/440 5W HT

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The Carrier

Newsletter of the Mt. Diablo Amateur Radio Club

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FIRST CLASS



W6CX Nets

Monday 7:00 pm Washington High School Net 147.060+

Monday 8:00 pm SATERN Net 147.060+

Thursday 7:30 pm MDARC Club Net 147.060+

Thursday 8:00 pm General ATV Net 1241.250+

Tuesday 7:30 pm Fat City 10 meter USB/CW Net 28.420 MHz

FM 147.060 MHz + / PL 100Hz - EchoLink: W6CX-R /133896, IRLP: 3057
224.780 MHz - / PL 77Hz 441.325 MHz + / PL 100Hz

D-STAR 145.000 offset plus 2.5 MHz

<https://stn3057.ip.irlp.net/status.html>

ATV Input: 1289.25 MHz AM/FM. Outputs 1241.25 MHz AM 919.25 MHz AM

ATV Internet Stream: <http://www.w6cxatv.net/live>

Contra Costa County Emergency Communications Nets

Every Thursday

<http://www.coco-races.org/meetings/nets/>

6:35 pm HF Countywide 3.893 MHz LSB

6:45 pm West County 145.110-- (82.5 PL)

7:00 pm Central County 145.680 Simplex

7:00 pm East County 146.535 Simplex

7:00 pm South County 146.355+ (77.0 PL)

7:20 pm Countywide 145.490-- (107.3 PL)

Concord Auxiliary Radio Emergency Service (CARES)

Wednesday 8:00pm 147.405 Simplex

June and July 2013 Club Calendar

Friday June 21, 2013	7:30pm	MDARC General Meeting - Field Day Site Heather Farms Park, 301 North San Carlos Drive, Walnut Creek
Saturday July 6, 2013	9:00 am	MDARC Technical Committee Environmental Center, 2581 Harbor Street, Pittsburg
Monday July 8, 2013	7:00 pm	MDARC Board Meeting Black Bear Restaurant, 700 Bancroft Avenue, Walnut Creek
Friday July 19, 2013	7:30 pm	MDARC General Meeting 1035 Carol Lane, Lafayette